IN THE CLAIMS

Please amend claims **2, 4, 7, 8.** (see below)

Please cancel claims **11-20** (non elected, withdrawn from consideration)

Please add claims **21-32.** (see below)

A full set of claims is presented herewith:

1. (canceled) A method for aligning three or more tire building drums moving through three or more work stations of an automated tire building system, the method comprising the step of:

independently moving each tire building drum through the three or more work stations so that an axis of revolution of each tire building drum is coincident with a working axis extending through the three or more work stations.

2. (currently amended) The method of claim [1] 4, further comprising the step of:

positioning the three or more work stations to be aligned to and spaced along a common, linear working axis.

3. (canceled) The method of claim 1, further comprising the steps of:

providing a rail system of two approximately parallel rails extending parallel to the working axis through the three or more work stations; and

causing each tire building drum to ride on the rail system through the three or more work stations.

4. (currently amended) A method for aligning three or more tire building drums moving through three or more work stations of an automated tire building system, the method comprising the step of:

independently moving each tire building drum through the three or more work stations so that an axis of revolution of each tire building drum is coincident with a working axis extending through the three or more work stations;

providing a rail system of two approximately parallel rails extending parallel to the working axis through the three or more work stations;

causing each tire building drum to ride on the rail system through the three or more work stations;

[The method of claim 3, further comprising the steps of:]

using both of the approximately parallel rails for supporting and vertically aligning each tire building drum as it rides through the three or more work stations; and

using only one of the approximately parallel rails for laterally aligning each tire building drum as it rides through the three or more work stations.

5. (original) The method of claim 4, further comprising the steps of:

providing a substantially flat top on a first rail of the two approximately parallel rails; and

providing a substantially inverted V-shaped top on a second rail of the two approximately parallel rails.

6. (original) The method of claim 5, further comprising the steps of:

providing at least one flat roller attached to each tire building drum to ride on the first rail; and

providing at least two pairs of V-mounted rollers attached to each tire building drum to ride on the second rail.

7. (currently amended) The method of claim [3], further comprising the steps of:

independently moving each tire building drum with a self-propelled vehicle traveling along the rail system; and

flexibly attaching each tire building drum to a one of the vehicles.

8. (currently amended) A method for aligning three or more tire building drums moving through three or more work stations of an automated tire building system, the method comprising the step of:

independently moving each tire building drum through the three or more work stations so that an axis of revolution of each tire building drum is coincident with a working axis extending through the three or more work stations;

[The method of claim 1,] further comprising the steps of:

providing a rail system of two approximately parallel rails extending parallel to the working axis through the three or more work stations; and

causing each tire building drum to ride on the rail system through the three or more work stations;

[The method of claim 3,] further comprising the steps of:

independently moving each tire building drum with a self-propelled vehicle traveling along the rail system; and

flexibly attaching each tire building drum to a one of the vehicles;

[The method of claim 7,] further comprising the steps of:

resting the tire building drum on the vehicle for moving the tire building drum to and from the rail system,

providing entry ramps on the rail system for raising the tire building drum off of the vehicle in order to ride on the rail system through the three or more work stations; and

providing exit ramps on the rail system for lowering the tire building drum in order to rest on the vehicle instead of riding on the rail system while not moving through the three or more work stations.

9. (original) The method of claim 8, further comprising the step of:

laterally funneling the tire building drum into the rail system at the entry ramps.

10. (original) The method of claim 8, further comprising the step of:

providing flat rollers attached to the tire building drum to ride up the entry ramps and to ride down the exit ramps.

11. (canceled) Apparatus for aligning three or more tire building drums moving through three or more work stations of an automated tire building system, the apparatus comprising:

means for independently moving each tire building drum through the three or more work stations so that an axis of revolution of each tire building drum is coincident with a working axis extending through the three or more work stations.

12. (canceled) The apparatus of claim 11, further comprising:

a rail system of two approximately parallel rails extending parallel to the working axis through the three or more work stations; and

means for enabling each tire building drum to ride on the rail system through the three or more work stations.

13. (canceled) The apparatus of claim 12, further comprising:

means for using both of the approximately parallel rails for supporting and vertically aligning each tire building drum as it rides through the three or more work stations; and

means for using one of the approximately parallel rails for laterally aligning each tire building drum as it rides through the three or more work stations.

14. (canceled) The apparatus of claim 12, further comprising:

means for independently moving each tire building drum; and

means for flexibly attaching each tire building drum to the moving means.

15. (canceled) The apparatus of claim 14, further comprising:

means for supporting and moving the tire building drum to and from the rail system;

entry means on the rail system for changing support of the tire building drum to the rail system while the tire building drum rides through the three or more work stations; and

exit means on the rail system for changing support of the tire building drum to the supporting and moving means instead of riding on the rail system while not moving through the three or more work stations.

16. (canceled) Apparatus for precision alignment of a moving tire building drum to an automated tire building system working axis, wherein the automated tire building system comprises one or more work stations with application drums aligned to the working axis, and a plurality of tire building drums wherein each tire building drum is independently moved into and out of each work station, the apparatus comprising:

a drum support frame having, under a one lateral side of the drum support frame, a total of at least one flat bearing roller; and, under an opposing lateral side of the drum support frame, having a total of at least two pairs of V-mounted bearing rollers;

a rail system comprising a first and a second approximately parallel rails passing through the one or more work stations, wherein the first rail is substantially flat-topped such that the at least one flat bearing roller rides on the first rail; and the second rail is substantially inverted V-shaped on top such that the at least two pairs of V-mounted bearing rollers ride on the second rail; and

positioning of apparatus components such that the drum support frame, the flat bearing rollers and the V-mounted bearing rollers are positioned relative to the tire building drum and the first and second rails; and the first and second rails are positioned relative to the working axis; such that when the at least one flat bearing roller rides on the first rail and the at least two pairs of V-mounted bearing rollers ride on the second rail, the tire building drum is riding on the rail system and is precision aligned to the working axis.

17. (canceled) The apparatus of claim 16, characterized in that:

the one or more work stations are aligned to and spaced along a common, linear working axis; and

the first and second approximately parallel rails comprise a single set of rails passing continuously through all of the one or more work stations.

18. (canceled) The apparatus of claim 16, further comprising:

a self-propelled vehicle traveling along the rail system for independently moving the tire building drum; and

a flexible attachment between the tire building drum and the vehicle.

19. (canceled) The apparatus of claim 18, further comprising:

entry ramps with funneling side ramps on an end of the rail system where the tire building drum enters the rail system to ride through the work station; and

exit ramps on an end of the rail system where the tire building drum exits the rail system after riding through the work station.

20. (canceled) The apparatus of claim 19, further comprising:

a truncated vertex of the substantially inverted V-shape of the second rail to create a substantially flat upper surface on the second rail and on its entry ramp and exit ramp;

one front flat roller mounted before, and one rear flat roller mounted after the at least two pairs of V-mounted bearing rollers, the front and rear flat rollers positioned to ride up the second entry ramp and to ride down the second exit ramp while having clearance to avoid using the front and rear flat rollers on the second rail; and

side rollers on the drum support frame positioned to engage with the funneling side ramps to laterally funnel the V-mounted bearing rollers onto the second rail.

Please enter the following new claims.

21. (new) The method of claim 8, further comprising the step of:

positioning the three or more work stations to be aligned to and spaced along a common, linear working axis.

22. (new) The method of claim 8, further comprising the steps of:

using both of the approximately parallel rails for supporting and vertically aligning each tire building drum as it rides through the three or more work stations; and

using one of the approximately parallel rails for laterally aligning each tire building drum as it rides through the three or more work stations.

23. (new) The method of claim 22, further comprising the steps of:

providing a substantially flat top on a first rail of the two approximately parallel rails; and

providing a substantially inverted V-shaped top on a second rail of the two approximately parallel rails.

24. (new) The method of claim 23, further comprising the steps of:

providing at least one flat roller attached to each tire building drum to ride on the first rail; and

providing at least two pairs of V-mounted rollers attached to each tire building drum to ride on the second rail.

25. (new) Method of A method for aligning a plurality of tire building drums with a plurality of work stations of an automated tire building system, comprising:

independently moving each tire building drum with a self-propelled vehicle traveling on a rail system having two parallel rails to the plurality of work stations;

supporting and vertically aligning each tire building drum with at least one of the parallel rails at each of the work stations;

laterally aligning each tire building drum with only one of the parallel rails at each of the work stastions;

26. (new) Method, according to claim 25, wherein:

an axis of revolution of each tire building drum is coincident with a working axis extending through the plurality of work stations.

27. (new) Method, according to claim 25, wherein:

assuring that each point along an entire drum length of the tire building drum axis of revolution is within a specified precision distance of the work station working axis.

28. (new) Method, according to claim 27, wherein:

assuring the precision distance by making the tire building drum axis of revolution coincident with the work station working axis.

29. (new) Method, according to claim 25, further comprising:

precisely registering a longitudinal position of the tire building drum relative to each work station.

30. (new) Method, according to claim 25, further comprising:

providing entry ramps on the rail system for raising the tire building drum off of the vehicle in order to ride on the rail system through the plurality of work stations; and

providing exit ramps on the rail system for lowering the tire building drum in order to rest on the vehicle instead of riding on the rail system while not moving through the plurality of work stations.

31. (new) The method of claim 30, further comprising the step of:

laterally funneling the tire building drum into the rail system at the entry ramps.

32. (new) The method of claim 30, further comprising the step of:

providing flat rollers attached to the tire building drum to ride up the entry ramps and to ride down the exit ramps.

IN THE SPECIFICATION

at page 1, line 11,

MANUFACTURING TIRES ON A FLEXIBLE MANUFACTURING SYSTEM, Attorney's